Application No. 09/473,638
Attorney Docket No. 15-IS-5286
Amendment dated September 1, 2004
Reply to Final Office Action of August 11, 2004

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1.   (Currently amended) For a picture archiving and communication system (PACS), a method for partial preprocessing of raw image data at an image acquisition workstation connected to the PACS system, the method comprising:

receiving raw image data from an imaging modality at ~~said~~ the image acquisition workstation;

storing predetermined preprocessing functions applicable to the raw image data,

wherein ~~said~~ the predetermined preprocessing functions include at least one of a frequency preprocessing function and a contrast preprocessing function, the frequency preprocessing function including at least one of an RN, RE, and RT preprocessing parameter, the contrast preprocessing function including at least one of a GT, GA, GC, and GS preprocessing parameter;

applying, at the image acquisition workstation, at least one and fewer than all of the preprocessing functions to the raw image data to form partially preprocessed raw image data[[,]];

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~~wherein at least one of said preprocessing functions is applied to said~~

~~partially preprocessed raw image data at a display workstation;~~

transmitting the partially preprocessed raw image data to a PACS network,

wherein ~~said~~ the PACS network includes a preprocessing database and an image

database, ~~said~~ the preprocessing database utilized for storing ~~said~~ the partially

preprocessed raw image data, ~~said~~ the image database utilized for storing a fully

preprocessed image data,

wherein ~~said~~ the fully preprocessed image data is created by applying all of ~~said~~

the preprocessing functions to ~~said~~ the raw image data to form fully preprocessed image

data; and

storing ~~said~~ the partially preprocessed raw image data in ~~said~~ the preprocessing

database,

<u>wherein at least one of the preprocessing functions is subsequently applied to</u>

<u>the partially preprocessed raw image data at a display workstation.</u>

2.   (Canceled)

3.   (Original)   The method of claim 1, wherein the step of applying further

comprises applying at least one frequency preprocessing function to the raw image data.

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4.   (Canceled)

5.   (Previously presented)   The method of claim 1, wherein the step of applying further comprises applying the at least one contrast preprocessing function to the raw image data.

6.   (Canceled)

7.   (Currently amended)   An image acquisition workstation for a picture archiving and communication system (PACS) and for partial preprocessing of raw image data, the image acquisition workstation comprising:

a processing circuit;

an imaging modality interface for receiving raw image data at the image acquisition workstation; and

a software memory coupled to the processing circuit, the software memory storing instructions for:

receiving the raw image data from an imaging modality;

applying, **at the image acquisition workstation,** at least one and fewer than all of predetermined preprocessing functions to the raw image data to form partially preprocessed raw image data,

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wherein ~~said~~ the predetermined preprocessing functions include at least

one of a frequency preprocessing function and a contrast preprocessing function,

the frequency preprocessing function including at least one of an RN, RE,

and RT preprocessing parameter, the contrast preprocessing function

including at least one of a GT, GA, GC, and GS preprocessing parameter

~~wherein at least one of said preprocessing functions is applied to said~~

~~partially preprocessed raw image data at a display workstation~~; and

transmitting the partially preprocessed raw image data to a PACS network

for storage in a preprocessing database,

wherein at least one of the preprocessing functions is subsequently

applied to the partially preprocessed raw image data at a display

workstation.

8.   (Original)   The image acquisition workstation of claim 7, wherein the

raw image data corresponds to an anatomical region, and wherein the at least one

preprocessing function applied to form the partially preprocessed raw image data is

selected based on the anatomical region.

9.   (Canceled)

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     10.   (Previously presented)   The image acquisition workstation of claim

7, wherein the applying instructions further comprise instructions for applying the at least

one frequency preprocessing function to the raw image data.

     11.   (Canceled)

     12.   (Previously presented)   The image acquisition workstation of claim

7, wherein the applying instructions further comprise instructions for applying the at least

one contrast preprocessing function to the raw image data.

     13.   (Canceled)

     14.   (Previously presented)   A medical data network comprising:

an imaging modality;

an image acquisition workstation;

a PACS network interfaced to the image acquisition workstation, the PACS

network comprising a networked PACS image database, display workstation, and

preprocessing database, and wherein the image acquisition workstation comprises:

a processing circuit;

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an imaging modality interface coupled to the imaging modality for receiving raw

image data at the image acquisition workstation; and

a software memory coupled to the processing circuit, the software memory storing

instructions for:

receiving the raw image data from an imaging modality;

applying, **at the image acquisition workstation,** at least one and fewer

than all of predetermined preprocessing functions to the raw image data to form

partially preprocessed raw image data,

wherein said predetermined preprocessing functions include at least one of

a frequency preprocessing function and a contrast preprocessing function, **the**

frequency preprocessing function including at least one of an RN, RE, and

RT preprocessing parameter, the contrast preprocessing function including

at least one of a GT, GA, GC, and GS preprocessing parameter

~~wherein at least one of said preprocessing functions is applied to said~~

~~partially preprocessed raw image data at a display workstation;~~ and

transmitting the partially preprocessed raw image data to a PACS network

for storage in a preprocessing database,

wherein at least one of the preprocessing functions is subsequently

applied to the partially preprocessed raw image data at a display

workstation.

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15.   (Original)   The medical data network of claim 14, wherein the raw

image data corresponds to an anatomical region, and wherein the at least one

preprocessing function applied to form the partially preprocessed raw image data is

selected based on the anatomical region.

16.   (Canceled)

17.   (Previously presented)   The medical data network of claim 14,

wherein the applying instructions further comprise instructions for applying the at least

one frequency preprocessing function to the raw image data.

18.   (Canceled)

19.   (Previously presented)   The medical data network of claim 14,

wherein the applying instructions further comprise instructions for applying the at least

one contrast preprocessing function to the raw image data.

20.   (Canceled)